[CLAIMS]

1. A polymer comprising a phenolic monomeric unit wherein the phenyl group of the phenolic monomeric unit is substituted by a group having the structure $-S-(L)_k-Q$ wherein S is covalently bound to a carbon atom of the phenyl group, wherein L is a linking group, k is 0 or 1 and Q comprises a heterocyclic group.

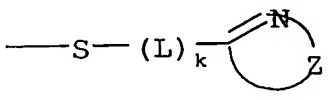
2. A polymer according to claim 1 wherein said heterocyclic group is aromatic.

3. A polymer according to claim 1 or 2 wherein said heterocyclic group contains at least one nitrogen atom in the ring of the heterocyclic group.

4. A polymer according to any of the preceding claims wherein said heterocyclic group has a 5- or 6-membered ring structure, optionally annelated with another ring system.

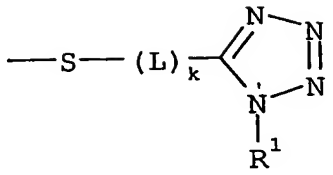
5. A polymer according to any of the preceding claims wherein the heterocyclic group is selected from an optionally substituted tetrazole, triazole, thiadiazole, oxadiazole, imidazole, benzimidazole, thiazole, benzthiazole, oxazole, benzoxazole, pyrazole, pyrrole, pyrimidine, pyrasine, pyridasine, triazine or pyridine group.

6. A polymer according to claim 1 wherein the $-S-(L)_k-Q$ comprises the following formula



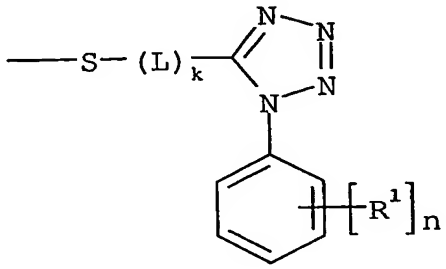
wherein Z represents the necessary atoms to form a 5- or 6-membered heterocyclic aromatic group, optionally annelated with another ring system.

7. A polymer according to claim 6 wherein the $-S-(L)_k-Q$ comprises the following formula



wherein R^1 is selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group.

8. A polymer according to claim 6 wherein the $-S-(L)_k-Q$ comprises the following formula



wherein n is 0, 1, 2, 3, 4 or 5,

wherein each R^1 is independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen, $-SO_2-NH-R^2$, $-NH-SO_2-R^5$, $-CO-NR^2-R^3$, $-NR^2-CO-R^5$, $-NR^2-CO-NR^3-R^4$, $-NR^2-CS-NR^3-R^4$, $-NR^2-CO-O-R^3$, $-O-CO-NR^2-R^3$, $-O-CO-R^5$, $-CO-O-R^2$, $-CO-R^2$, $-SO_3-R^2$, $-O-SO_2-R^5$, $-SO_2-R^2$, $-SO-R^5$, $-P(=O)(-O-R^2)(-O-R^3)$, $-O-P(=O)(-O-R^2)(-O-R^3)$, $-NR^2-R^3$, $-O-R^2$, $-S-R^2$, $-CN$, $-NO_2$ or $-M-R^2$, wherein M represents a divalent linking group containing 1 to 8 carbon atoms,

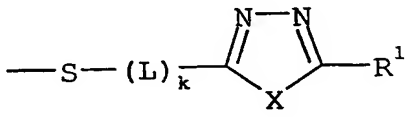
wherein R^2 to R^4 are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

wherein R^5 is an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or

heteroaralkyl group,

or wherein at least two groups selected from each R^1, R^2, R^3, R^4 and R^5 together represent the necessary atoms to form a cyclic structure.

9. A polymer according to claim 6 wherein the $-S-(L)_k-Q$ comprises the following formula



wherein X is O, S or NR^3,

wherein R^1 is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen or $-L^1-R^2$,

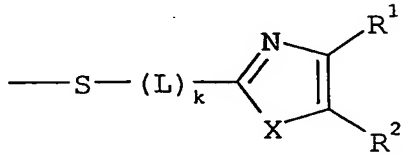
wherein L^1 is a linking group,

wherein R^2 is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen or -CN,

wherein R^3 is selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

or wherein at least two groups selected from R^1, R^2 and R^3 represent the necessary atoms to form a cyclic structure.

10. A polymer according to claim 6 wherein the $-S-(L)_k-Q$ comprises the following formula



wherein X is O, S or NR^4,

wherein R^1 and R^2 are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen or $-L^1-R^3$,

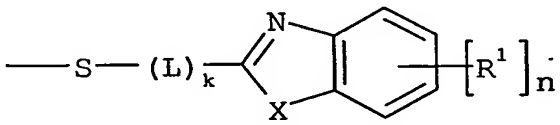
wherein L^1 is a linking group,

wherein R^3 is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen or -CN,

wherein R^4 is selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

or wherein at least two groups selected from R^1, R^2, R^3 and R^4 together represent the necessary atoms to form a cyclic structure.

11. A polymer according to claim 6 wherein the $-S-(L)_k-Q$ comprises the following formula



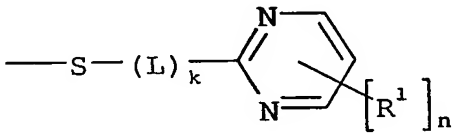
wherein n is 0, 1, 2, 3 or 4,

wherein X is O, S or NR^5,

wherein each R^1 is independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen, $-SO_2-NH-R^2$, $-NH-SO_2-R^6$, $-CO-NR^2-R^3$, $-NR^2-CO-R^6$, $-NR^2-CO-NR^3-R^4$, $-NR^2-CS-NR^3-R^4$, $-NR^2-CO-O-R^3$, $-O-CO-NR^2-R^3$, $-O-CO-R^6$, $-CO-O-R^2$, $-CO-R^2$, $-SO_3-R^2$, $-O-SO_2-R^6$, $-SO_2-R^2$, $-SO-R^6$, $-P(=O)(-O-R^2)(-O-R^3)$, $-O-P(=O)(-O-R^2)(-O-R^3)$, $-NR^2-R^3$, $-O-R^2$, $-S-R^2$, -CN, $-NO_2$ or $-M-R^2$, wherein M represents a divalent linking

group containing 1 to 8 carbon atoms,
wherein R^2 to R^5 are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,
wherein R^6 is an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,
or wherein at least two groups selected from each R^1, R^2, R^3, R^4, R^5 and R^6 represent the necessary atoms to form a cyclic structure.

12. A polymer according to claim 6 wherein the $-S-(L)_k-Q$ comprises the following formula

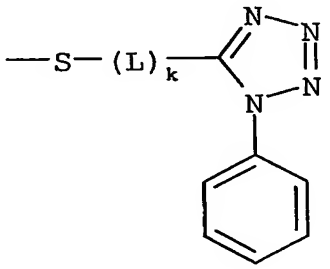


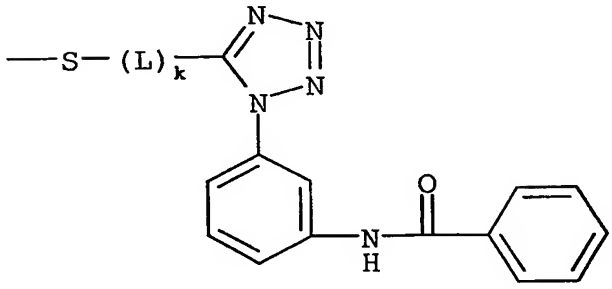
wherein n is 0, 1, 2 or 3,
wherein each R^1 is independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen, $-SO_2-NH-R^2$, $-NH-SO_2-R^5$, $-CO-NR^2-R^3$, $-NR^2-CO-R^5$, $-NR^2-CO-NR^3-R^4$, $-NR^2-CS-NR^3-R^4$, $-NR^2-CO-O-R^3$, $-O-CO-NR^2-R^3$, $-O-CO-R^5$, $-CO-O-R^2$, $-CO-R^2$, $-SO_3-R^2$, $-O-SO_2-R^5$, $-SO_2-R^2$, $-SO-R^5$, $-P(=O)(-O-R^2)(-O-R^3)$, $-O-P(=O)(-O-R^2)(-O-R^3)$, $-NR^2-R^3$, $-O-R^2$, $-S-R^2$, $-CN$, $-NO_2$ or $-M-R^2$, wherein M represents a divalent linking group containing 1 to 8 carbon atoms,
wherein R^2 to R^4 are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,
wherein R^5 is an optionally substituted alkyl, alkenyl, alkynyl,

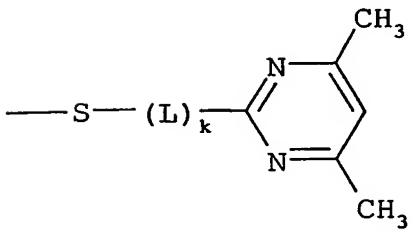
cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

or wherein at least two groups selected from each R^1, R^2, R^3, R^4 and R^5 together represent the necessary atoms to form a cyclic structure.

13. A polymer according to claim 6 wherein the $-S-(L)_k-Q$ comprises one of the following formula:







14. A polymer according to any of the preceding claims, wherein said polymer comprising a phenolic monomeric unit is a novolac, resol or polyvinylphenol.

15. A heat-sensitive lithographic printing plate precursor comprising a support having a hydrophilic surface and an oleophilic coating, provided on the hydrophilic surface, said coating comprising an infrared light absorbing agent and a polymer according to any of the preceding claims.

16. A lithographic printing plate precursor according to claim 15, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

17. A lithographic printing plate precursor according to claim 16, wherein said dissolution inhibitor is selected from

- an organic compound which comprises at least one aromatic group and a hydrogen bonding site, and/or
- a polymer or surfactant comprising siloxane or perfluoroalkyl units.

18. Use of a polymer, according to any of the claims 1 to 14, in a coating of a positive working heat-sensitive lithographic printing plate precursor, further comprising

- an infrared absorbing agent and
- a dissolution inhibitor,

for increasing the chemical resistance of the coating against printing liquids and press chemicals.

19. A lithographic printing plate precursor according to claim 15, wherein said coating further comprising a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precusor.

20. Use of a polymer, according to any of the claims 1 to 14, in a coating of a negative working heat-sensitive lithographic printing plate precursor, further comprising

- an infrared absorbing agent,
- a latent Brönsted acid and
- an acid-crosslinkable compound,

for increasing the chemical resistance of the coating against printing liquids and press chemicals.

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